

Regional HIV/AIDS Epidemiologic Profile of Southeast Health Service Region (HSR), Massachusetts: 2013

Recent changes to the presentation of Massachusetts HIV/AIDS surveillance data

Effective January 1, 2011, the Massachusetts Department of Public Health (MDPH), Bureau of Infectious Diseases, HIV/AIDS fact sheets, epidemiologic reports and other HIV data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts. As of January 1, 2013, this resulted in the removal of 3,529 HIV/AIDS cases, of which 914 have died and 2,615 were living. These persons living with HIV/AIDS may still continue to reside and receive care in the Commonwealth. The total number of persons living with HIV/AIDS, irrespective of location at diagnosis, is the basis for MDPH service planning. This change is partially a result of increased activities required by the Centers for Disease Control and Prevention (CDC) for de-duplication among states in an effort to identify cases that are counted multiple times in the National HIV/AIDS Surveillance System. The cases are assigned to the state that reports the earliest date of AIDS diagnosis if available. If the case has not progressed to AIDS, the case is assigned to the state with the earliest HIV diagnosis date. Please note that previous HIV/AIDS fact sheets, data reports and presentations included cases that may have been first diagnosed in another state.

Also effective January 1, 2011, the MDPH HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to eliminate the presumed heterosexual exposure mode category for males; those cases have been reassigned to the no identified risk (NIR) exposure mode category. The presumed heterosexual exposure mode category was used with the intention of identifying HIV exposure mode for females when sex with males is the only reported risk factor, there is no evidence of current or past injection drug use (IDU), and behavioral risk and HIV status information about male sexual partners are unknown. Twenty-nine percent of females living with HIV/AIDS and 40% of recent female HIV diagnoses are reported in the presumed heterosexual exposure mode category. The application of the presumed heterosexual exposure mode category to males is overly inclusive in that female to male HIV transmission is biologically less probable, and there are alternate exposure modes that are possible for males, including sex with other men (MSM) or IDU. The CDC reports males diagnosed with HIV/AIDS who report sex with females as their only risk factor, without corresponding partner risk or HIV status information, in the NIR exposure mode category. This revision to report presumed heterosexual male HIV/AIDS cases as NIR will bring Massachusetts HIV/AIDS case reporting for males in alignment with CDC standards. The MDPH will maintain presumed heterosexual and heterosexual exposure mode categories for females.

Table 1. Total number of people reported with HIV infection or AIDS¹ by mortality status on December 31, 2012: Southeast HSR, Massachusetts²

	N	%
People Living with HIV/AIDS	2,520	57%
People Reported with HIV or AIDS who are Deceased	1,892	43%
Total Number of People Reported with HIV Infection or AIDS	4,412	100%

¹ Does not include individuals diagnosed with HIV infection (non-AIDS) who died prior to January 1, 1999 or who were not in care on January 1, 1999

² Effective January 1, 2011, the Massachusetts Department of Public Health HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

Data Source: MDPH HIV/AIDS Surveillance Program, Data as of 1/1/13

Table 2. Average annual rate of HIV infection diagnosis from 2009 to 2011 and HIV/AIDS prevalence rate on 12/31/12¹: Southeast HSR, Massachusetts²

Average annual HIV diagnosis rate from 2009–2011	Average rate per 100,000	Average annual number of HIV diagnoses
Southeast HSR, MA	7.3	92.7
Massachusetts Total	10.3	664.7

HIV/AIDS prevalence rate on 12/31/12	Rate per 100,000	Number of people living with HIV/AIDS
Southeast HSR, MA	198.9	2,520
Massachusetts Total	277.5	18,170

¹ The denominators for rate calculations are from the MDPH Massachusetts Race Allocated Census 2010 Estimates (MRACE 2010), Massachusetts Department of Public Health, Bureau of Health Information, Statistics, Research, and Evaluation.

² Effective January 1, 2011, the Massachusetts Department of Public Health HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

Data Source: MDPH HIV/AIDS Surveillance Program, Data as of 1/1/13

Table 3. People living with HIV/AIDS¹, deaths among people reported with HIV/AIDS, and newly diagnosed HIV infections by year²: 2002–2011, Southeast HSR, Massachusetts³

Year	HIV/AIDS Prevalence	Deaths among those with HIV/AIDS	Diagnosis of HIV Infection
2002	1,942	66	152
2003	1,989	69	116
2004	2,055	50	116
2005	2,105	53	103
2006	2,175	43	113
2007	2,249	40	114
2008	2,288	50	89
2009	2,349	48	109
2010	2,387	46	84
2011	2,445	27	85

¹ Number of people living with HIV/AIDS on 12/31 of each year

² Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available ten-year period after the implementation of HIV infection reporting in 1999.

³ Effective January 1, 2011, the Massachusetts Department of Public Health HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

Data source: MDPH HIV/AIDS Surveillance Program, Data as of 1/1/13

Table 4. People diagnosed with HIV infection from 2009–2011¹ and people living with HIV/AIDS on December 31, 2012 by gender, place of birth, race/ethnicity, exposure mode, age at HIV infection diagnosis and current age: Southeast HSR, Massachusetts²

HIV Infection Diagnoses			PLWH/A	
Gender:	N	%	N	%
Male	197	71%	1,779	71%
Female	81	29%	741	29%
Place of Birth:	N	%	N	%
US	193	69%	1,895	75%
Puerto Rico/US Dependency ³	9	3%	151	6%
Non-US	76	27%	474	19%
Race/Ethnicity:	N	%	N	%
White (non-Hispanic)	150	54%	1,542	61%
Black (non-Hispanic)	85	31%	566	22%
Hispanic/Latino	37	13%	372	15%
Exposure Mode:	N	%	N	%
Male-to-male sex (MSM)	118	42%	973	39%
Injection Drug Use (IDU)	20	7%	539	21%
MSM/IDU	6	2%	77	3%
Heterosexual Sex	36	13%	383	15%
Other	0	0%	54	2%
Total Undetermined	98	35%	494	20%
• Presumed Heterosexual Sex ⁴	34	12%	178	7%
• Undetermined ⁵	64	23%	316	13%
Age:	N	%	N	%
	At Diagnosis		On December 31, 2012	
Under 13	0	0%	3	<1%
13 to 19	9	3%	11	<1%
20 to 24	24	9%	36	1%
25 to 29	16	6%	64	3%
30 to 34	34	12%	98	4%
35 to 39	30	11%	141	6%
40 to 44	47	17%	276	11%
45 to 49	47	17%	480	19%
50 to 54	30	11%	557	22%
55 to 59	24	9%	458	18%
60+	17	6%	396	16%
Total⁶	278	100%	2,520	100%

¹ Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available three-year period after the implementation of HIV infection reporting in 1999.

² Effective January 1, 2011, the Massachusetts Department of Public Health HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

³ Ninety-eight percent of people diagnosed with HIV infection from 2009–2011 who were born in a US dependency were born in Puerto Rico, 1% were born in the US Virgin Islands, 1% were born in Guam and 1% were born in an unknown dependency.

⁴ Includes female sex with male of unknown HIV status or risk. This category is limited to females.

⁵ Includes male sex with female of unknown HIV status or risk, those still being followed up for risk information, those who have died with no determined risk, and those lost to follow-up.

⁶ Total includes Asian/Pacific Islander, American Indian/Alaska Native, other and unspecified race/ethnicity.

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), Data as of 1/1/13

Table 5. People living with HIV/AIDS on December 31, 2012 by gender and race/ethnicity: Southeast HSR, Massachusetts¹

Race/Ethnicity:	Male		Female	
	N	%	N	%
White (non-Hispanic)	1,208	68%	334	45%
Black (non-Hispanic)	306	17%	260	35%
Hispanic/Latino	242	14%	130	18%
Asian/Pacific Islander	12	1%	5	1%
Total²	1,779	100%	741	100%

¹ Effective January 1, 2011, the Massachusetts Department of Public Health HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

² Total includes American Indian/Alaska Native, other and unspecified race/ethnicity.

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), Data as of 1/1/13

Table 6. People living with HIV/AIDS on December 31, 2012 by gender and exposure mode: Southeast HSR, Massachusetts¹

Exposure Mode:	Male		Female	
	N	%	N	%
Male-to-male sex (MSM)	973	55%	N/A	N/A
Injection drug use (IDU)	320	18%	219	30%
MSM/IDU	77	4%	N/A	N/A
Heterosexual sex	109	6%	274	37%
Other	32	2%	22	3%
Total Undetermined	268	15%	226	30%
• Presumed heterosexual sex ²	N/A	N/A	178	24%
• Undetermined ³	268	15%	48	6%
Total	1,779	100%	741	100%

¹ Effective January 1, 2011, the Massachusetts Department of Public Health HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

² Includes female sex with male of unknown HIV status or risk. This category is limited to females.

³ Includes male sex with female of unknown HIV status or risk, those still being followed up for risk information, those who have died with no determined risk, and those lost to follow-up.

N/A=Not Applicable

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), Data as of 1/1/13

Table 7. People diagnosed with HIV infection by gender and year of diagnosis: Southeast HSR, Massachusetts¹, 2002–2011²

	Male		Female		Total
	N	%	N	%	
2002	108	71%	44	29%	152
2003	79	68%	37	32%	116
2004	88	76%	28	24%	116
2005	85	83%	18	17%	103
2006	80	71%	33	29%	113
2007	90	79%	24	21%	114
2008	64	72%	25	28%	89
2009	78	72%	31	28%	109
2010	62	74%	22	26%	84
2011	57	67%	28	33%	85

¹ Effective January 1, 2011, the Massachusetts Department of Public Health HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

² Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available ten-year period after the implementation of HIV infection reporting in 1999.

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), Data as of 1/1/13

Table 8. People diagnosed with HIV infection by race/ethnicity and year of diagnosis: Southeast HSR, Massachusetts¹, 2002–2011²

	White Non-Hispanic		Black Non-Hispanic		Hispanic/Latino		Total ³
	N	%	N	%	N	%	N
2002	87	57%	30	20%	31	20%	152
2003	76	66%	28	24%	10	9%	116
2004	62	53%	23	20%	28	24%	116
2005	63	61%	27	26%	12	12%	103
2006	64	57%	28	25%	15	13%	113
2007	61	54%	27	24%	24	21%	114
2008	46	52%	31	35%	12	13%	89
2009	57	52%	31	28%	20	18%	109
2010	49	58%	25	30%	10	12%	84
2011	44	52%	29	34%	7	8%	85

¹ Effective January 1, 2011, the Massachusetts Department of Public Health HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

² Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available ten-year period after the implementation of HIV infection reporting in 1999.

³ Totals include Asian/Pacific Islander, American Indian/Alaskan Native individuals, and those of other or undetermined race/ethnicity.

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), Data as of 1/1/13

Table 9. People diagnosed with HIV infection by place of birth and year of diagnosis: Southeast HSR, Massachusetts¹, 2002–2011²

	US		Puerto Rico/ US Dependency ³		Non-US		Total
	N	%	N	%	N	%	N
2002	105	69%	18	12%	29	19%	152
2003	86	74%	6	5%	24	21%	116
2004	77	66%	12	10%	27	23%	116
2005	77	75%	6	6%	20	19%	103
2006	79	70%	-- ⁴	-- ⁴	-- ⁴	-- ⁴	113
2007	74	65%	7	6%	33	29%	114
2008	56	63%	-- ⁴	-- ⁴	-- ⁴	-- ⁴	89
2009	74	68%	5	5%	30	28%	109
2010	62	74%	-- ⁴	-- ⁴	-- ⁴	-- ⁴	84
2011	57	67%	-- ⁴	-- ⁴	-- ⁴	-- ⁴	85

¹ Effective January 1, 2011, the Massachusetts Department of Public Health HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

² Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available ten-year period after the implementation of HIV infection reporting in 1999.

³ Ninety-eight percent of all people diagnosed with HIV infection in MA who were born in a US dependency were born in Puerto Rico, 1% were born in the US Virgin Islands, <1% were born in American Samoa, <1% were born in Guam and 1% were born in an unknown dependency.

⁴ Values less than five are suppressed for populations less than 50,000 or for populations of unknown size. Additional values may be suppressed to prevent back calculation.

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), Data as of 1/1/13

Table 10. People diagnosed with HIV infection by exposure mode and year of diagnosis: Southeast HSR, Massachusetts¹, 2002–2011²

	MSM		IDU		MSM/ IDU		HTSX		Other		Pres. HTSX ³		Undeter- mined ⁴		Total
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N
2002	52	34%	37	24%	-- ⁵	-- ⁵	25	16%	-- ⁵	-- ⁵	10	7%	21	14%	152
2003	42	36%	18	16%	-- ⁵	-- ⁵	17	15%	-- ⁵	-- ⁵	15	13%	19	16%	116
2004	47	41%	14	12%	-- ⁵	-- ⁵	14	12%	-- ⁵	-- ⁵	11	9%	25	22%	116
2005	48	47%	14	14%	-- ⁵	-- ⁵	12	12%	-- ⁵	-- ⁵	-- ⁵	-- ⁵	20	19%	103
2006	56	50%	12	11%	-- ⁵	-- ⁵	10	9%	-- ⁵	-- ⁵	14	12%	20	18%	113
2007	50	44%	15	13%	-- ⁵	-- ⁵	15	13%	-- ⁵	-- ⁵	8	7%	23	20%	114
2008	33	37%	8	9%	6	7%	16	18%	0	0%	9	10%	17	19%	89
2009	45	41%	7	6%	-- ⁵	-- ⁵	18	17%	-- ⁵	-- ⁵	12	11%	25	23%	109
2010	37	44%	9	11%	-- ⁵	-- ⁵	10	12%	-- ⁵	-- ⁵	9	11%	17	20%	84
2011	36	42%	-- ⁵	-- ⁵	-- ⁵	-- ⁵	8	9%	0	0%	13	15%	22	26%	85

¹ Effective January 1, 2011, the Massachusetts Department of Public Health HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

² Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available ten-year period after the implementation of HIV infection reporting in 1999.

³ Includes female sex with male of unknown HIV status or risk. This category is limited to females.

⁴ Includes male sex with female of unknown HIV status or risk, those still being followed up for risk information, those who have died with no determined risk, and those lost to follow-up.

⁵ Values less than five are suppressed for populations less than 50,000 or for populations of unknown size. Additional values may be suppressed to prevent back calculation.

MSM = Male-to-Male Sex; IDU = Injection Drug Use; MSM/IDU = Male-to-Male Sex and Injection Drug Use; HTSX = Heterosexual Sex; Pres. HTSX = Presumed Heterosexual Sex

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), Data as of 1/1/13

Table 11. People diagnosed with HIV infection and AIDS within two months and all people diagnosed with HIV infection by year of diagnosis: Southeast HSR, Massachusetts¹, 2002–2011²

	HIV and AIDS diagnosed within two months	All HIV infection diagnoses	% diagnosed with HIV and AIDS within two months
Year:	N	N	%
2002	70	152	46%
2003	44	116	38%
2004	48	116	41%
2005	38	103	37%
2006	46	113	41%
2007	39	114	34%
2008	34	89	38%
2009	39	109	36%
2010	25	84	30%
2011	29	85	34%

¹ Effective January 1, 2011, the Massachusetts Department of Public Health HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

² Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available ten-year period after the implementation of HIV infection reporting in 1999.
Data Source: MDPH HIV/AIDS Surveillance Program, Data as of 1/1/13

Table 12. People diagnosed with HIV infection and AIDS within two months and all people diagnosed with HIV infection by gender, race/ethnicity, and place of birth: Southeast HSR, Massachusetts,¹ 2009–2011²

	HIV and AIDS diagnosed within two months	All HIV infection diagnoses	% diagnosed with HIV and AIDS within two months
Gender:	N	N	%
Male	64	197	32%
Female	29	81	36%
Race/Ethnicity:	N	N	%
White (non-Hispanic)	45	150	30%
Black (non-Hispanic)	29	85	34%
Hispanic/Latino	14	37	38%
Asian/Pacific Islander	-- ⁵	-- ⁵	-- ⁵
Other/Undetermined ³	-- ⁵	-- ⁵	-- ⁵
Place of Birth:	N	N	%
US	-- ⁵	-- ⁵	-- ⁵
Puerto Rico/US Dependencies ⁴	-- ⁵	-- ⁵	-- ⁵
Non-US	31	76	41%
Total	93	278	33%

¹ Effective January 1, 2011, the Massachusetts Department of Public Health HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

² Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available three-year period after the implementation of HIV infection reporting in 1999.

³ Includes American Indian/Alaska Native, other and unspecified race/ethnicity.

⁴ Ninety-eight percent of people diagnosed with HIV infection from 2009–2011 who were born in a US dependency were born in Puerto Rico, 1% were born in the US Virgin Islands, 1% were born in Guam and 1% were born in an unknown dependency.

⁵ Values less than five are suppressed for populations less than 50,000 or for populations of unknown size. Additional values may be suppressed to prevent back calculation.

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), Data as of 1/1/13